Plants

1-2 The student will demonstrate an understanding of the special characteristics and needs of plants that allow them to survive in their own distinct environments. (Life Science)

1.2.3 Classify plants according to their characteristics (including what specific type of environment they live in, whether they have edible parts, and what particular kinds of physical traits they have).

Taxonomy level: 2.3-B Understand Conceptual Knowledge

Previous/Future knowledge: This is the first time that students have been introduced to these characteristics of plants. Students will not specifically study plants structures again until 6th grade (6-2) when the student will demonstrate an understanding of structures, processes, and responses of plants that allow them to survive and reproduce.

It is essential for students to know that each plant has a specific environment they call home, that some plants have parts we can eat, and that some plants have physical traits that make them unique from other plants.

Environment

- The surroundings of living things: the air, water, plants, animals, and Earth.
- Each plant has a particular environment where they thrive. For example, a cactus likes hot, dry environments. It would not survive outdoors in an environment that had snow most of the time.

Edible parts

- The part of the plant you can eat. Some examples of plant parts that can be eaten are:
  - Stems: asparagus, celery, onions
  - Roots: carrots, beets, radishes, yams, turnips
  - Leaves: lettuce, spinach, cabbage
  - Flowers: broccoli, cauliflower, artichokes
  - Fruit: tomatoes, peaches, pumpkins, apples, oranges, cucumbers
  - Seeds: wheat, rice, corn, beans, peas, nuts

Physical traits

- Something that makes one plant different from another. Examples of physical traits are the shape of leaves, the color of flowers, spines on a cactus, thorns on a rose or the stalk of celery.

NOTE TO TEACHER: Select plants and plant parts from some of the examples listed above in this indicator.

It is not essential for students to know every plant that can be found.

Assessment Guidelines:

The objective of this indicator is to *classify* plants according to their characteristics; therefore, the primary focus of assessment should be to determine whether a plant belongs to a category based on its descriptions. However, appropriate assessments should also require students to

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recognize the specific environment where a plant lives; *identify* an edible and an inedible plant; or *illustrate* using pictures or words an environment where a plant would thrive.